



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	A/C
PO038598	ACI001-VC	1	1	Net 30	M6061T6R0.250	6061-T6 Round Bar 0.250" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				20	12/13/2017	20	✓	S021843	Stock	12/14/2017	\$ 0.16 / ft	
		2			M6061T6R0.375 <i>Astm ?</i>	6061-T6 Round Bar .375" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft						20	✓	S021844	Stock	12/14/2017	\$ 0.38 / ft	
		3			M6061T6R1.500	6061-T6 Round Bar 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft						20	✓	S021845	Stock	12/14/2017	\$ 5.52 / ft	
		4			M6061T6R0.625	6061-T6 Round Bar .625" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				40		40	✓	S021846	Stock	12/14/2017	\$ 1.00 / ft	
		5			M6061T6R0.750	6061-T6 Round Bar .750" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft						40	✓	S021847	Stock	12/14/2017	\$ 1.34 / ft	
		7			M304R0.4375	304 Round Bar 0.4375 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft				12		12	✓	S021848	Stock	12/14/2017	\$ 1.53 / ft	
		9			M303R0.500	303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft				36		36	✓	S021849	Stock	12/14/2017	\$ 1.97 / ft	
		10			M303R0.750	303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft						36	✓	S021850	Stock	12/14/2017	\$ 4.75 / ft	

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	A C
		12			M4140H-R1.250	4140 Round Bar 1.250 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434-BC/- A193-03-GRADE B7/-A29- 03/-A322-91 OR UNS#- G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft				6		6		S021851	Stock	12/14/2017	\$ 6.92 / ft	
		13			M6061T6B0.625X01.50	6061-T6 Bar .625 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				20		20		S021852	Stock	12/14/2017	\$ 3.26 / ft	
		14			M6061T6B1.000X04.00	6061-T6 Bar 1.00 X 4.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S021853	Stock	12/14/2017	\$ 12.77 / ft	
		16			M6061T6B1.000X02.000	6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				40		36		S021854	Stock	12/14/2017	\$ 7.46 / ft	
		18			M304S16GA	304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf				192		192		S021855	Stock	12/14/2017	\$ 6.51 / sf	
		19	2		M304S14GA	304SS sheet .080 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf				64		64		S021856	Stock	12/14/2017	\$ 8.37 / sf	
		20	1		M304S22GA	304/316 .032 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf				96	12/13/2017	32		S021857	Stock	12/14/2017	\$ 3.62 / sf	
Total:										654		586						



ACIER OUELLETTE INC.

Order - Sales

Copy

CO00066318

935, Boul. du Havre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CL10001056

Date

2017/12/11

Delivery date

2017/12/12

Your order N°

38598

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Page

1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only						
				CMD	EXP	B/O	IN	I	S	C	OUT		
1 ROUND ALU 1/4 6061-T6 RANDOM RAL-14-V 5135  1 X 20' HEAT : 67081	1.16	20.00	PL_\$CLB	1.00									
→ 2 ROUND ALU 3/8 6061-T6 RANDOM RAL-38-V 5160  1 X 20' HEAT: C24551/1-4-1	2.64	20.00	PL_\$CLB	1.00									
3 ROUND ALU 1 1/2 6061-T6 RANDOM RAL-112-V 5119  1 X 20' HEAT: 36375	41.52	20.00	PL_\$CLB	1.00									
4 ROUND ALU 5/8 6061-T6 RANDOM RAL-58-V 5169  2 X 20' HEAT 66092	14.44	40.00	PL_\$CLB	2.00									

NIR : R-109516-6

Next Page...



**ACIER OUELLETTE INC.**  
935, Boul. du Hâve  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 MD: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 MU: 514-336-4246 Ext.: 866-456-4242

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Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only						
				CMD	EXP	B/O	IN	I	S	C	OUT		
5 ROUND ALU 3/4 6061-T6 RANDOM RAL-34-V 5157 2 X 20' HEAT. 68706 md	20.92	40.00	PL_\$CLB	2.00									
6 ROUND SS 7/16 304 RANDOM RSS-716-V 5779 1 X 12' R/L HEAT. 102445 md	6.13	12.00	PL_\$CLB	1.00									
7 ROUND SS 1/2 303 RANDOM RSS-12303-V 5727	24.01	36.00	PL_\$CLB	3.00									
8 ROUND SS 3/4 303 RANDOM RSS-34303-V 5761 3 X 12' R/L HEAT. 233C md 490862 md 490862 md DEC 14 2017	54.07	36.00	PL_\$CLB	3.00									

NIR : R-109516-6

Next Page...



ACIER OUELLETTE INC.

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Copy

CO00066318

935, Boul. du Havre  
Salaberry de Valleyfield (Québec) J65 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

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DART AEROSPACE LTD

1270, ABERDEEN ST.  
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**Shipped to**

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Page

3

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
9 ROUND 4140 HEAT TREAT 1 1/4 RANDOM R4140-114H-V 4897 1 X 6' HEAT: NF16202066 COUPE A LA SCIE SCIE 1	25.03	6.00	PL_SCLB	1.00							
10 FLAT ALU 5/8 X 1 1/2 6061-T6 RANDOM FAL-58112-V 2631 1 X 20' HEAT: 201604056	22.06	20.00	PL_SCLB	1.00							
11 FLAT ALU 1 X 4 6061-T6 RANDOM FAL-14-V 2532 1 X 12' HEAT: 68708	57.60	12.00	PL_SCLB	1.00							
12 FLAT ALU 1 X 2 6061-T6 RANDOM q 2497 2 X 20' HEAT: 5207765802	96.00	40.00	PL_SCLB	2.00							

NIR : R-109516-6

Next Page...



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DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

, Ontario,  
Att : CHANTAL LAVOIE Tél.: 613-632-5200  
Delivery Route 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only						
				CMD	EXP	B/O	IN	I	S	C	OUT		
13 SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 6 X 4' X 8' HEAT: (350J) ml	504.00	192.00	PI2_SCLB	6.00									
14 SHEET SS 14G SS304-2B (4 X 8) FESS-14G483042B 3412 2 X 4' X 8' HEAT: (L22142025) ml	209.98	64.00	PI2_SCLB	2.00									
15 SHEET SS 22G SS304-2B (4 X 8) FESS-22G483042B 3436 3 X 4' X 8' HEAT: (208T) ml SURCHARGE ENERGETIQUE FRAIS_ENERGETIQUE	126.05	<del>96.00</del> 32	PI2_SCLB	3.00									
			\$	0.00									

Total Weight (LBS) : 1 205.61

NIR : R-109516-6

### Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cleared. All test materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and its warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at the choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, lost or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Y M D

Total (\$CAD)

3 582.21

Deposit

0.00

Balance

3 582.21

#5160

LES ACIERS OUELLETTE INC.  
BARRE RONDE LAITON C360 F.C. ASTM B16  
.375" DIA X 144.000"  
PART NO.

PO/Rel AC00009208

We certify that this is a true copy of the report  
furnished by the products of the metal, or data  
resulting from tests made in approved labs.

## Certificate of Mill Test Results

TH. PEC-064365-001

20 Sep 17

Signed by: 

Pg 1/1



Walcownia Metali  
"DZIEDZICE" S.A.  
43-502 Czechowice-Dziedzice  
ul. Kaniowska 3

ŚWIADECTWO ODBIORU 3.1  
INSPECTION CERTIFICATE 3.1

EN10204

Nr Świadectwa / Certificate No.

C24551/1-4-1

Adres wysyłkowy: THYSSENKRUPP MATERIALS NA  
Delivery address: TORONTO 2821 LANGSTAFF ROAD  
CONCORD, LAK 5C6 ONTARIO KANADA

Zamawiający: THYSSENKRUPP MATERIALS NA  
Purchaser: 2821 LANGSTAFF ROAD CONCORD, LAK 5C6  
ONTARIO KANADA

Nr zlecenia wytwórcy:  
Order No: C24551

Nr zamówienia klienta: PEC-282949  
Purchase Order No:

Nr kontraktu:  
Our contract No:

Pozostałe oznaczenia:  
Other indications:

## Wyszczególnienie zamówienia / Order Specification

Przedmiot odbioru: Pręty Ciągowe / Okrągły / Odcinki

Dodatkowe wymagania:

Object of inspection: Rod / Drawn / Round / Sections

Additional requirements:

Oznaczenie:

Designation: B.Recs C.36000 H02 RND 0.375" x 144"

Galunek / Alloy:	C36000	Parameter / Parameter	Wymiar / Dimension [mm]	Tolerancja / Tolerance
Norma chemiczna / Chemical standard:	ASTM B16-10	Średnica zewnętrzna / OD (width) [inch]	9.525	
Stan dostawy / Temper:	H02 - wg ASTM B16	Średnica wewnętrzna / ID [inch]		
Norma wytrzymałościowa / Mechanical standard:	ASTM B 249-10	Grubość / Thickness [inch]		
Norma wymiarowa / Tolerance standard:	ASTM B 249-10	Długość OD / Dimensions-long [inch]	36.0	
Kształt:		Długość ID / Dimensions-long [inch]		

## Skład chemiczny / Chemical composition [%]

Nr partii / Lot No	Cu	Pb	Fe	Zn	Przebieg / Others test
C24551/1-4-1	60.47	2.6	0.14	resztą węgla	0.126

## Właściwości mechaniczne / Mechanical properties

	Rm [ksi]	Rp0.2 [ksi]	A [%]
Min	62.50	49.01	16
Max	63.51	50.17	16
Liczba prób	4	4	4

## Pakowanie / Packing

Styki, Waga / Pieces	Skrynie / Cases	Waga netto / Net Weight [lb]	Oznaczenie / Marking
375 / pcs.	7	6873.93	16

## Uwagi / Comments

Próbki i wymiary zostały sprawdzone zgodnie z zamówieniem.  
Surface and the dimensions had been tested and were found to comply with the order.

Materiał odpowiadający produktowi w Polsce.  
Material meeting the product manufactured in Poland.

Na podstawie przeprowadzonych badań wytrzymałościowych i badań technologicznych uznano, że wykonany materiał jest zgodny z warunkami zamówienia oraz z Dyrektywą RoHS II nr 2011/65/EC.  
Based on the strength and technological tests it was concluded that the material had been made in accordance with the terms of the contract and RoHS II Directive no. 2011/65/EC.

Załącznik / Attachment  
Laboratory Team / Laboratorium  
Michał Wala

Dokument generowany komputerowo / Computer-generated document

Czechowice-Dziedzice 2017-05-26

<http://www.walcedzice.com.pl>

Strona / Page 1/1

KAB 38

# 2497

49203



GERDAU

CANAL-CANABRIDGE  
160 ORION PLACE  
CANABRIDGE, ONT. M9R  
Canada

CUSTOMER INFO TO  
LUSACHERS TRANSSEC 1997 LITE  
22 J.F. KENNEDY BLVD  
SAINT-JEROME, QC J7Y 4H4  
Canada

CUSTOMER MATERIAL NO  
4837538/00210

GRAB  
LENGTH  
4.870 LB

DATE  
10/17/2017

REVISIONS  
ASTM A6-14A 30-14, ASME SA-36  
ASTM A570-15, ASHITO M270-12  
CSA G40 30-13 G40 21-13

CUSTOMER PURCHASE ORDER NUMBER  
004742HSN02P

BILL OF LADING  
1301-6000029197

DATE  
04/17/2017

CHEMICAL COMPOSITION	C	Mn	P	S	Si	Al	Ni	Cr	Mo	V	Nb
%	%	%	%	%	%	%	%	%	%	%	%
0.14	0.92	0.014	0.017	0.17	0.34	0.12	0.16	0.029	0.024	0.001	

MECHANICAL PROPERTIES	GA Inch	UTS ksi	UTS MPa	YS ksi	YS MPa
Elong.					
22.00	8.000	76476	527	58834	406
20.00	8.000	76441	527	58824	406

COMMENTS - NOTES  
This grade meets the requirements for the following grades:  
ASTM Grades: A36, A570-50, A572-50, A709-50, A709-50  
CSA Grades: 44W, 50W  
ASHITO Grades: M270-50, M270-50  
ASME Grades: SA36

The above figures are certified chemical and physical test records as contained in the permanent records of company. We certify that these data are correct and in compliance with specified requirements. This material, including the billers, was melted and manufactured in Canada. CNTR complies with EN 10201 3.1.

*Marking*  
QUALITY DIRECTOR

*Marking*  
QUALITY ASSISTANT

Phone: (416) 291-0114 Fax: (416) 291-0115 Email: gerdaucanada@gerdaucanada.com

Phone: (416) 605-5811 Fax: (416) 605-5812 Email: gerdaucanada@gerdaucanada.com



#5135

TRA-1498

## Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : LES ACIERS TRANSBEC (1997) LTEE.

Adresse / Address : 4054 BOUL. LE CORBUSIER, #201  
LAVAL, QC  
H7L5R2

# commande Sapa / Sapa order # : 6090684

# bon de commande / Purchase order # : OU-46528

# de matrice / Die # : MS 13128

Description : 1/4" O.D. ROD

Alliage & trempage / Alloy & temper : 6061 T6 Longueur / Length : 6097 mm

# Contrôle / Control # : 76511-3

# Coulée / Cast # : 67081

Dureté Rockwell E /  
Rockwell E hardness : 88 HRE

Min. requis /  
Min. required : 88 HRE

Max. permis /  
Max. permitted : 100 HRE

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.05 Max	0.05 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	---	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : 2016-10-06



Gilles Pelletier  
Technicien de la qualité  
Quality technician

RA-1498

RAL-112-V #5119

4907L Tra-1884

## BON DE LIVRAISON

VENDU A	ACIERS TRANSBEC (1997) LTEE		
	4054, BOUL LE CORBUSIER		
	#201		
	LAVAL, QC		
	H7L 5R2		
	NO CLIENT: 3693		

NO CLIENT: L-3693

NO DU BON		DATE DE LIVRAISON	
120289		12/May/17	
R-015478-2		450-863-3693	
NO COMMANDE CLIENT		REPRESENTANT	
PAJ-47729		Guillaume Morin	
CHAUFFEUR		NO COMMANDE EXTRUDEV	
JIMMY AYOTTE		104648	

NO ITEM	NO DE FILIERE	NO PIECE CLIENT	DESCRIPTION ALLIAGE / TRENPAUR	LONGUEUR	FINITION	COMMANDE CLIENT NB PIECES KILOS	A VENIR NB PIECES KILOS	NO TICKET NB PIECES	EN LIVRAISON NB PIECES KILOS	%	5
14	SA00586		PIECE RONDE 1 1/2 8061/ITG	6086mm	NATUREL MILL	27 500	0 0	104648-14-1A1 400519	29 547		
Sous-Total:								1	29 547		

## 3 MILLTEST - CERT. CONFORMITE

## Mill Test (Tensile Properties of Aluminum)

Test Date: 4/May/17

Order No.	Alloy	Temper	Yield (ksi)	Ultimate Tensile (ksi)	Total Elongation (%)	Hardness (Rockwell E)	Conductivity %	Report No
104648-14-1A1	8061	16	43.0	45.9	16.75	94.90		6990

## Certificate of compliance (Certificat de conformité)

Normes: (ANSI H35.1-1997) &amp; (ASTM B221)

Order No.	Hardness (Webster) #1 #2	Cast No.	CAST CHEMICAL COMPOSITION:															
104648-14-1A1	15	J6375	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Hf	Pb
			99.08	0.55	0.10	0.10	0.07	0.83	0.25	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

RAL 112

12 MAI 2017

SIGNATURE  
EXTRUDEV:SIGNATURE  
CLIENT:

DATE: 05/12/17 12

45454

68623

Rue St

## Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : **LES ACIERS TRANSBEC (1997) LTEE.**

Adresse / Address : **4054 BOUL. LE CORBUSIER, #201  
LAVAL, QC  
H7L5R2**

# commande Sapa / Sapa order # : **6031289**

# bon de commande / Purchase order # : **OU-45668**

# de matrice / Die # : **MS 9907**

Description: **5/8"DIA ROD**

Alliage & trempage / Alloy & temper : **6061 T6** Longueur / Length : **6097 mm**

# de contrôle / Control # : **65547-1**

# de coulée / Cast # :

**66092**

Dureté Rockwell E /  
Rockwell E hardness : **93 HRE**

Min. requis /  
Min. required : **88 HRE**

Max. permis /  
Max. permitted : **100 HRE**

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.05 Max	0.05 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	---	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : **2016-05-12**



Gilles Pelletier  
Technicien de la qualité  
Quality technician

#5157

## Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : **LES ACIERS TRANSBEC (1997) LTEE.**

Adresse / Address : **4054 BOUL. LE CORBUSIER, #201  
LAVAL, QC  
H7L5R2**

# commande Sapa / Sapa order # : **7020941**

# bon de commande / Purchase order # : **OU-47416**

# de matrice / Die # : **MS 9909**

Description : **3/4" ROD**

Alliage & trempage / Alloy & temper : **6061 T6** Longueur / Length : **6097 mm**

# Contrôle / Control # : **85611-1**

# Coulée / Cast # : **68706**

Dureté Rockwell E /  
Rockwell E hardness : **91 HRE**

Min. requis /  
Min. required : **88 HRE**

Max. permis /  
Max. permitted : **100 HRE**

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,66 - 0,74	0,14 - 0,28	0,08 - 0,16	0,18 - 0,26	0,46 - 0,54	0,03 Max	0,05 Max	0,05 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	---	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : **2017-03-28**

Daniel Alfredo Pelletier  
Directeur Qualité  
Quality Director

#5779

Fidelity C 17182

**VIRAJ PROFILES LIMITED**

Works: SURVEY NO.- 25/1, 25/2, 26 & 34, Village- MAAN, Taluka- PALGHAR, Dist.- THANE, MAHARASHTRA -401 506, INDIA,  
e-mail- vielqc@viraj.com

**MILL'S CERTIFICATE**

<b>ORDER NO</b>	<b>PACKING LIST NO</b>	<b>INSPECTION NO</b>	<b>DATE</b>
P004885	64/1008331/5	100006886214	07.07.2016
		<b>GRADE</b>	<b>HEAT No</b>
		304/304L	102445

**BUNDLE NO :**  
1100534981, 1100534980,

**DESCRIPTION**

STAINLESS STEEL BRIGHT BARS

**COLD DRAWN POLISHED - 2H**

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
7/16"	ROUND	ASTM A484	12' - 14'	328	2,020,000 LB

**CHEMICAL ANALYSIS**

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0270	1.380	0.420	0.0220	0.0340	18.400	8.060	0.700	0.340	0.150	0.08500

**TEST RESULTS**

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	Reduction Of Area %	Hardness BHN	Grain Size NOS
94.0	108.0	42.0	70.0	220.0	7.0

**SPECIFICATION:**

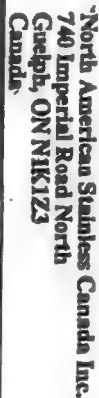
MATERIAL CONFIRMS TO DIN EN 10088-3:2005:WNR 1.4301/1.4307, EN 10222-5 AND EN 10272 COND-A & ASTM A182/A-182M-15, ASTM A276/A276M-16 COND A, A479/A479M-15 COND A, A193/A193M-12b B8 CL-1, A320/A320M-11a B8 CL-1, A484 16, A388/A388M-05, ASME SA182-14, SA479-11, SA 193-11 B8 CL-1, SA320-11 B8 CL-1, ASTM A314-2008, IGC SATISFACTORY AS PER ASTM A 262-10 PRACTICE E, AMS 5639H /AMS5647J (EXCEPT MARKING), QQ-S-763F, NACE MR0103-2012, NACE-MR0175/ISO-15156-2015, SAE-AMS-S-7720A, MIL-S-862-D, AISI 304/304L & UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1.

**REMARKS**

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO:FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO:GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED. MELT SOURCE:AOD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION.COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

WORKS INSPECTOR  
K R K MURTHY



# METALLURGICAL TEST REPORT

**6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000**

certificado: 284329 2

Customer: 007080 003

Date: 4/28/2017 Page: 1

**Steel: 303**

**Plasma: CD****Your order!** **W5668**

MAJ Order: **IR 0246269 04**

**Control:**

**PRODUCT DESCRIPTION:**

~~UNCLAS~~ ~~CONFIDENTIAL~~ COLD DEW  
DUEB 30300, ASTR 158712 EN 10204 3.1, ATRM D468/15  
AMS 5640V TYPE 1, 068-764S CONDITION A  
BOULDER ANNUAL TEMP 1900F MIN

## РЕЗНАРК

COMPLIES W/REQUIREMENTS OF DEAN 252.225-7009 EU DIRECTIVE  
2011/65/EU, LOBB. EAT+MOD+CC. NO FIELD REPAIR. MELTED AND NOT  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY COMPOSITION

Product Id	Std #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BI4236 4				610	144.00	5	1	

CHEMICAL ANALYSIS												
CM(Country of Mfg) ES(Spain) UB(United States) ZA(South Africa) JP(Japan)												
LEAD ACCREDITATION BUREAU, 180/IEC 17025, Certificate# L2323												
Chemical Analytals per ASTM A751/14a												
MS&P	CH	C %	CO %	CR %	CU %	NI %	NO %	N %	SI %	P %		
233C		.0277	.0065	17.1705	.2750	1.9155	.2835	.0461	8.6390	.0260		
	S %	SI %										
		.3165	.4585									

# MECHANICAL PROPERTIES

Product ID	1 0 0	6 1 7	MS No.	.279 TGT	UTS TGT	MA %	Ring % 2"
M6256 A	N L		240.0	73.94	101.32	30.39	29.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

**Technical  
Dept. Mgr.**

**KRIS LARK**

4/18/2017

5760

RSS-34303-2

107131

Laminado 1017 A/2 A/A: Fupate  
P.O. Box 1325 48094 N.Mex.  
Tel: 505/481-1701  
Fax: 505/481-1701

Management Systems  
Certified by  
IRQA  
ISO 9001 / SC1 6860360  
ISO 14001 / SC1 1870678

ACEROS INOXIDABLES

OLARRA

48389

Trade Mark - Zeichen des Industriewerks  
Anzeichen der Identifizierung



Works Inspector Stamp - Werks-Inspektionsstempel  
Stempel des Inspektors

3

Certificate type - APZ Nach Certificado tipo		EN 10204/3.1		Certificate n° Prof N° Certificado n°		271387		Date - Datum - Fecha 02 - 05 - 2016	
Our order N° Works - Nr N° de Referencia		599799		Heat Schmelz Coada		409862		Your order N° Bestell Nr Pedido N°	
Steel Grade Werkstoff Calidad		AISI-303		According to Entsprechend Correspondence		ASTM A 582 / A 582M-12			
Shape and Size - Gegenstand Perfil y dimension ROUND 3/4"		Tolerance - Toleranz Tolerancia		ASTM A 484 / TB.7		Bundles Bunde Rultos		2	
						Bars Stäbe Barras		Weight Gewicht Peso	
								2549 lbs	
Requirements - Anforderungen - Exigencias									
QQ-S 784B-70. AMD2 COND.A. SAE AMS 5640U-07. TYPE I. EN 10.088-3.2014. 1.4305. MECAMAX - PLUS									
Melting process / Erhmelzungsart / Proceso de Fusión					Heat treatment / Wärmebehandlung / Tratamiento térmico				
E.A.F. / A.O.D.					1050C 4H/Std WATER/WASSER/AGUA				
Solution annealed / Abgeschreckt / Hipertempe / Cold drawn / Gezogen / Estirado / Polished / Polier / Pulido									
Test results - Ergebnis der Prüfungen - Resultados de los ensayos									
Dimension of Specimen Abmessungen des Probekörpers Medida de las probetas		Rp0.2%		Rp 1%		Rm		A A	
RD. 12.50 mm.		KSI		KSI		KSI		11.5D % 4D	
Min								Z	
Max								Hardness Harte HBw	
Temperature °C 20		Spec N° Probe Nr Pro N°		1		74		87	
								103	
								37	
								55	
								229	
C		Si		Mn		P		S	
Min								0.150	
Max		0.150		1.00		2.00		0.200	
		0.016		0.39		1.83		0.035	
								0.309	
								17.65	
								0.34	
								8.45	
								0.53	
								0.0365	
								0.15	
Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional		O.K.		Radioactivity inspection Radioaktivitätskontrolle Control de Radioactividad		O.K.		Anti mixing test Spektroskopische Verwachsungstest Anti mezcla	
								O.K.	
								Grain Size Korngröße Tamaño de grano	
Remarks - Bemerkungen - Observaciones									
Free From Mercury contamination / Quecksilberfreiheit. No weld repair.									
FDV / FDP Acc. EN 10.201 Marian Tejedo Quality Mng 185064									

#4897

R-4140-1144-V

TPA 2012

# CERTIFICATE OF TEST

## CERTIFICAT D'ESSAIS

Page 01 of 02

 Certification Date  
1-SEP-2017

 CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

 Invoice Number  
S697041

AC00008879

PART NUMBER/NUMÉRO DE PIÈCE

 SOLD TO: ACIER OUELLETTE INC  
VENDU À:

 SHIP TO:  
EXPÉDIÉ À:

ACIER OUELLETTE INC.

 22 BOULEVARD J-F KENNEDY  
ST JEROME QC J7Y 4B6

 22 BOULEVARD J F KENNEDY  
SAINT JEROME QC J7Y 4

 Description: 4140/42 HEAT TREATED GROUND AND POLISHED BAR  
1-1/4 RD X 24" R/L Line Total: 102 LB  
HEAT: NF16202066 ITEM: 506068

## Specifications:

 - ASTM A193 GR B7 15  
- ASTM A108 13

 ASTM A434 CL BC 12  
ASTM A29 15

ASME SA193 GR B7 15

## CHEMICAL ANALYSIS

AL	C	CB	CR	CU	MN	MO	NI
0.025	0.41	0.003	0.96	0.14	0.90	0.17	0.10
P	S	SI	SN				
0.011	0.019	0.25	0.0090				

RCPT: R136834

COUNTRY OF ORIGIN : USA

## MECHANICAL PROPERTIES

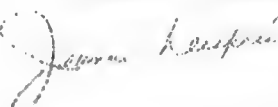
DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS BHN
	122.5	140.0	18.5	55.5	305

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



 MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ



# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date  
1-SEP-2017

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number  
S697041

AC00008879  
PART NUMBER/NUMÉRO DE PIÈCE

<b>SOLD TO:</b>	ACIER OUELLETTE INC	<b>SHIP TO:</b>	ACIER OUELLETTE INC.
<b>VENDU À:</b>	22 BOULEVARD J-F KENNEDY	<b>EXPÉDIÉ À:</b>	22 BOULEVARD J F KENNEDY
	ST JEROME QC J7Y 4B6		SAINT JEROME QC J7Y 4

Description: 4140/42 HEAT TREATED GROUND AND POLISHED BAR  
1-1/4 RD X 24' R/L Line Total: 102 LB

HEAT: NF16202066		ITEM: 506068												
END-QUENCH HARDENABILITY (JOMINY - RC)														
1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
57	57	57	57	57	57	56	54	53	51	48	47	44	44	43
24	28	32												
41	39	36												

IDEAL DIAMETER : 5.2 IN GRAIN SIZE :8 -

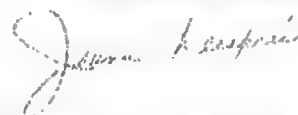
MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL  
THERMAL TREATMENT: OK  
AUSTENTIZE TEMP. 1600 F TIME (HR) 1 QUENCH MEDIUM OIL  
TEMPER TEMP 1150 DEG F TIME (HR) 1  
STRESS REL. TEMP. 1050 DEG F TIME (HR) 1.00  
MACRO: OK

COMMENTS  
surface finish 32 ra  
red. ratio 32.4:1  
melted & mfg in usa  
mill: nucor steel division

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.  
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Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ



Service Center Metals

5850 Glenview Ave.  
Chicago, IL 60638

CERTIFIED INSPECTION REPORT AND TEST RESULTS  
FOR EXTRUDED PRODUCTS



WARRANTY NUMBER

26772

CUSTOMER PO

DEC-27-04-36

SUPPLIER PART NUMBER

R30106 X 240

TEST NUMBER

R30106

INSPECTION NUMBER

6061-06-01

DESCRIPTION

SCRIB 625X 500

DATE RECEIVED

3/6/2016

SALES PERSON

D. Schroeder, Chicago

TEST REPORT

ASTM B221-11 Series 6061

SPECIFICATION

ALUMINUM 6061-T6 63505000

PREPARATION

ROHS 2011 66 EU Comp 311

CUSTOMER NUMBER  
255557

SCM is ISO 9001:2015 certified

This product is RoHS 2 REACH and CEHS compliant

Mechanical Properties

Tests	Lot No	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201604056	5/4/16	min 61.30 max 62.00	min 49.30 max 49.50	min 12.15 max 13

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Each	Others	Test Source
12271502	201604056	6061	0.75	0.36	0.33	0.11	0.90	0.08	0.07	0.02	97.38	0.05	0.15	United States of America

SCM products are melted and extruded in the USA

Circle 1: Information Dimension of Aluminum & Technical Certificate

Print Date: 12/11/2015

4-11-2015

2552

## Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : LES ACIERS TRANSBEC (1997) LTEE.

Adresse / Address : 4054 BOUL. LE CORBUSIER # 201  
LAVAL, QC  
H7L5R2

# commande Sapa / Sapa order # : 7021578

# bon de commande / Purchase order # : OU-47427

# de matrice / Die # : MS 16386

Description : 4.00" X 1.00" FLAT BAR

Alliage & trempage / Alloy & temper : 6061 T6

Longueur / Length : 3657 mm

# Contrôle / Control # : 86430-1

# Coulée / Cast # : 68708

Dureté Rockwell E /  
Rockwell E hardness : 93 HRE

Min. requis /  
Min. required : 88 HRE

Max. permis /  
Max. permitted : 100 HRE

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.05 Max	0.05 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	—	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen) .


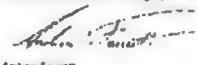
We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : 2017-03-31

Daniel Alfreido Pelletier  
Directeur Qualité  
Quality Director

# 3419

Manufacturer / Fabricante / Hersteller <b>outokumpu</b> 		Type of document / Tipo de documento / Art der Prüfbescheinigung <b>INSPECTION CERTIFICATE</b> <b>CERTIFICADO DE INSPECCION</b> <b>ABNAHMEPRÜFZEUGNIS</b> according to / de acuerdo con / nach <b>EN 10204-3.1</b>		Document number / Nº de certificado / Bescheinigungsnummer <b>0000253804 /</b> Page / Página / Seite <b>1 / 1</b>																					
1 Steel Drive; P.O. Box 13000; Calvert, AL 36513-1300		Customer's order number / Nº de Pedido Cliente / Kundenbestellnr. <b>C17332</b> Manufacturer's work order no. / Nº de Orden Manufactura / Werkbestellungsnummer <b>901213420 / D02</b> Delivery note no. / Nº de Entrega / Lieferungsnummer <b>85464320 / 010</b> Product / Producto / Erzeugnis <b>SHEET/HOJAS/BLECH</b> Steel grade and quality / Acero / Stahlgüte und Gütegruppe <b>TYPE 304L/304</b>																							
Terms of delivery / Condiciones de entrega / Lieferbedingungen <b>ASTM A240/A240M-16a, ASME SA-240 Sec. II part A Ed.2015</b> <b>ASTM A480/A480M-16b, ASME SA-480 Sec. II part A Ed.2015</b> <b>ASTM A666-15</b>																									
Customer's material no. / Nº de material del cliente / Kundenmaterial-Nr. <b>7081585</b>		Product dimensions (Thickness / Width / Length) / Dimensiones (Espesor / Ancho / Largo) / Maße des Erzeugnisses (Dicke / Breite / Länge) <b>1.52 mm x 1,219.20 mm x 2,438.40 mm</b> <b>0.0600 inch x 48.0000 inch x 96.0000 inch</b>		Steelmaking procedure / Proceso de manufactura / Herstellungsart <b>AOD</b>																					
Inlet / Salida / Abgabe <b>514212</b>		Heat / Calor / Wärme <b>USA</b>		Sample ID / Nº de muestra / Proben-Nr. <b>1000461411</b>																					
Country of Heat / País de calor / Land/Herstellungsland <b>USA</b>		Chemical composition / Composición Química / Chemische Zusammensetzung <table border="1"> <thead> <tr> <th>% C</th> <th>% Si</th> <th>% Mn</th> <th>% P</th> <th>% S</th> <th>% Cr</th> <th>% Mo</th> <th>% Ni</th> <th>% N</th> <th>% Cu</th> </tr> </thead> <tbody> <tr> <td>0.027</td> <td>0.38</td> <td>1.20</td> <td>0.025</td> <td>0.0010</td> <td>18.05</td> <td>0.21</td> <td>8.03</td> <td>0.067</td> <td>0.27</td> </tr> </tbody> </table>		% C	% Si	% Mn	% P	% S	% Cr	% Mo	% Ni	% N	% Cu	0.027	0.38	1.20	0.025	0.0010	18.05	0.21	8.03	0.067	0.27	Sample ID / Nº de muestra / Proben-Nr. <b>1000461412</b>	
% C	% Si	% Mn	% P	% S	% Cr	% Mo	% Ni	% N	% Cu																
0.027	0.38	1.20	0.025	0.0010	18.05	0.21	8.03	0.067	0.27																
Sample Position / Local de la muestra / Probenlage <b>TRANSVERSE</b>																									
Inspection lot / Lote de inspección / Prüfung <b>1000461411</b>		Y80.2% <b>PSI / MPa</b>		TS <b>PSI / MPa</b>																					
<b>1000461412</b>		<b>43,510 / 300</b>		<b>97,316 / 671</b>																					
<b>42,784 / 295</b>		<b>97,026 / 669</b>		<b>57.7</b>																					
				<b>84</b>																					
				<b>84</b>																					
Resistance to intergranular corrosion / Resistencia contra corrosión inter-granular / Beständigkeit geg. überhitzt. Korrosion: <b>ASTM A 262 PRACTICE E - Sample Acceptable</b> Dimensions-surface / Dimensiones-Superficie / Maße-Oberfläche: <b>OK</b> Test of identity (spectrum analysis) / Control de Identidad (análisis espectroscópico) / Verwechslungsprüfung (Spektralanalyse): <b>OK</b> Heat Treatment: Solution annealed 1920 °F Min, Air or water cooled Bending test O.K. No welding or weld repairs were performed on this material No intentional additions of Mercury compounds were made or used Free of radioactive contamination EU RoHS Directive 2011/65/EU Compliant Product manufactured in the USA Country of Heat as per ISO 3166-1																									
Design of the document / Origen del documento / Art der Bescheinigung <b>Outokumpu Stainless USA, LLC</b> <b>An ISO 9001: 2008 certified company</b> <b>EU PED 97/23/EC, Annex I, 4.3 certified</b> Certificate is provided automatically / Certificado es generado automáticamente / Der Leup ist wurde automatisch erstellt		The information provided is a true copy of data on file / Los datos / información proporcionada es una copia verdadera de los datos archivados / Die gemeldeten Werte entsprechen den gespeicherten Daten  Andrew J. Scott Printer: 1 251 878 3452 Name of expert / Nombre del experto / Name des Sachverständigen		Date of issue and validation / Fecha de emisión y validación / Datum Ausstellung / Bescheinigung <b>02/27/2017</b> This document shall not be altered or reproduced, except in full / Este documento, sus datos, o los datos suministrados en otros no may be reproduced by any means																					

P998707



# DECLARATION OF INTENT

DATTI CHIDREDDY

12/13/16

INVOICE  
657047

## # ELONG AT FRACTURE


GRADE VERIFICATION WAS CARRIED OUT SPECTROSCOPICALLY

EN 10204:2005 - 3.1 CERTIFICATE DOES NOT INDICATE PED APPROVAL FOR THIS MATERIAL.

THESE COMMODITIES OR TECHNOLOGY, WHEN EXPORTED FROM THE UNITED STATES, ARE IN ACCORDANCE WITH THE USA EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW IS PROHIBITED. U.S. LAW ALSO PROHIBITS DISPOSITION OF THESE COMMODITIES/TECHNICAL DATA TO ANY END-USER OR FOR ANY END-USE RELATED TO THE DESIGN, DEVELOPMENT, PRODUCTION, STOCKPILING, OR USE OF CHEMICAL, BIOLOGICAL, OR NUCLEAR WEAPONS, OR MISSILES, WITHOUT THE PROPER APPROVAL OF THE UNITED STATES GOVERNMENT.

THIS CERTIFIED MATERIAL TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL. FEDERAL LAW PROHIBITS THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE AND MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL LAW. ATI FRP HOLDS SEVERAL QUALITY CERTIFICATIONS THAT INCLUDE ISO-9001, AS9100, NADCAP, AND ISO/IEC 17025. MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH THE ATI FRP QUALITY MANUAL, REVISION 24 DATED 10/16/2015.

The above is a true copy of data on file. The material and that results conform to the sales contract and specification(s) as set forth in All Fast Rotted Products' Order Acknowledgement.

Stephen Wolf -   
 Director, Corporate Quality Assurance

### CERTIFICATE OF TEST

DATE SUBMITTED

2/13/16

INVOICE  
57047

12/13/16 08:21:39

The above is a true copy of data on file. The material and test results conform to the sales contract and specification(s) as set forth in All Pals Robot Products' Order Acknowledgement.



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Guelph, ON N1K1Z3  
(502) 347-6000

Certificate: 283280 2

Customer: 007035 510

Your Order: 789405

NAS Order: PN 0077612 11

Corrosion: ASTM A262/15 A:180Bend-OK

Date: 4/13/2017 Page: 1

Steel: 306

Finish: 2B

### PRODUCT DESCRIPTION

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED, UNS 30600  
ASTM A240 15B, A480/15, A666/15, A666/15, A666/15, A666/15  
CHEM ONLY ON FOLLOWING ASTM: A276/16, A479/16, A484/15, A312/16  
CHEM ONLY ON FOLLOWING ASTM: A312/13, A312/13, A312/13  
AMS 5513J XRR: MIL-8-5059D AMEND 3 (X CROWN REAS)  
NACE MR0175/ISO 15156-3:2009 A, MR0101/07/008765D-A X NAO PERI  
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

### REMARKS:

Mat'1 is free of Mercury Contamination. No weld repairs.  
EN 10204:2004 3.1, RoHS 1 & 2 Compliant  
Material is free of Radioactive Contamination  
Steel Making Process: EAF, AOD, & Cont. Casting  
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001  
Melted & Manufactured in the USA; Mat'1 is DPAS Compliant

Product Id	Coil #	Std # thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
043507 B	043507 B	.0680	48.0000	19.070	COIL	16	1	74264052

### CHEMICAL ANALYSIS

CM(Country of Mfg) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate 12323  
Chemical Analysis per ASTM A751/16a

CM	C %	CR %	CU %	NI %	MO %	N %	NI %	P %	S %
US	.0428	18.0790	.3505	1.6670	.2805	.0799	8.0535	.0270	.0011

SI %

.3115

### MECHANICAL PROPERTIES

Product Id#	Coil #	1/4" Tensile	20C .2% YS	20C Elong	% Hard	Red Hard
043507 B	043507 B	F T	100.40	52.90	46.75	88.50
						87.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

4/13/2017



FESS-14G48 3042B

TRA-1418

## INSPECTION CERTIFICATE

 燦茂實業股份有限公司  
YUE MA CORP.

INVOICE NO. 3  
COMMODITY 2  
APPLICATION 1  
CITY CODE 1

F17M310  
PRIMARY COLD ROLLED STAINLESS STEEL SHEETS  
AISI 304 2B FINISH WITH PAPER INTERLEAVED  
AISI 304  
METAL SOURCES, INC.

工廠地址：新竹縣新豐路345號  
345, SHUN AN RD., LU CHU HSIANG  
KAOHSIUNG HSIEI, TAIWAN R.O.C.  
TEL: (07) 9972845 FAX: (07) 9973006  
CERTIFICATE NO: F17N810-1  
DATE OF ISSUE: 08/14/2017

[illegible]

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS  
BEEN MADE IN ACCORDANCE WITH THE RULES OF THE AAR CERTIFICATE

ASTM A66-15/ASME SA66-15 ANNEALED  
COUNTRY OF ORIGIN AND MANUFACTURE: TAIWAN  
\*Material is first marked on Logo/ non-prime side

[illegible]

YIEN MAUCORP

# BVR 3419

2209

PJ3538  
47476

**NAS**  
North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

# METALLURGICAL TEST REPORT

6870 Highway 42 East  
Glenview, KY 41045-9615  
(502) 347-6000

Certificate: 244878 3  
Customer: 007035 501

Your Order: 786645

NAS Order: PN 0074023 03

Date: 12/08/2016 Page: 1  
Steel: 304  
Finish: 2B  
Corrosion: ASTM A262/15 A180Bend-OK

## PRODUCT DESCRIPTION

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED, UNS 30400  
ASTM A240/15b, A480/15, A666/15, ASME SA240/15, SA480/15, SA666/15  
CHEM ONLY ON FOLLOWING ASTM: A276/15, A479/15, A484/15, A312/16  
UNS 316/15, 316L/15, 317/15, 317L/15, 321/15, 321H/15, 304/15, 304L/15  
UNS 316/15, 316L/15, 317/15, 317L/15, 321/15, 321H/15, 304/15, 304L/15  
NACE MR0175/ISO 15156-3:2009 A, MR0103/07/Q9766D-A X MAG PERM  
MIN. SOLUTION ANNEAL, TEMP 1900F, WATER QUENCHED

## REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.  
EN 10204:2004 3.1, 3.2, 3.3 & 3.4 Compliant  
Material is Free of Radioactive Contamination  
Steel Making Process: EAF, AOD, & Cont. Casting  
Product Mfg. by a Quality Mfg. Sys. in Cont. w/ISO 9001  
Melted & Manufactured in the USA. Mat'l is DPMs Compliant

Product ID	Coil #	Std #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
052087 AA	052087 AA		.0300	48.0000	16,690 COIL		9	1	74355225

CHEMICAL ANALYSIS									
CIN(Country of Origin) ES(Spain) US(United States) ZA(South Africa) JP(Japan)									
HEAT	CM	C	%	CR	%	CU	%	NI	%
2087	US	.0411	18.1210	.4495	1.7280	.3085	.0752	8.1155	.0270

MECHANICAL PROPERTIES									
Product ID#	Coil #	UTS	20C	YS	20C	ELONG	%	Redl	Grain
052087 AA	052087 AA	F	104.99	59.76	43.71	56.50	13.00	61.00	Hard R45T

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr. KRIS LARK 12/08/2016

## Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : **LES ACIERS TRANSBEC (1997) LTEE.**

Adresse / Address : **4054 BOUL. LE CORBUSIER # 201  
LAVAL, QC  
H7L5R2**

# commande Sapa / Sapa order # : **6120924**

# bon de commande / Purchase order # : **OU - 47030**

# de matrice / Die # : **MS 9903**

Description : **3/8" ROD**

Alliage & trempage / Alloy & temper : **6061 T6**

Longueur / Length : **6097 mm**

# de contrôle / Control # : **82386-1**

# de coulée / Cast # : **68219**

Dureté Rockwell E /  
Rockwell E hardness : **89 HRE**

Min. requis /  
Min. required : **88 HRE**

Max. permis /  
Max. permitted : **100 HRE**

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,66 - 0,74	0,14 - 0,28	0,08 - 0,16	0,18 - 0,26	0,46 - 0,54	0,03 Max	0,05 Max	0,05 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	---	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme **ASTM B-221-14** excepté pour la section 8.2 (nombre de spécimen) .

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

Sincèrement vôtre,  
Yours truly,

date : **2017-01-27**



Gilles Pelletier  
Technicien de la qualité  
Quality technician

F.L. 2017

#2497

FAC-12-✓

F0.1-25  
49289**CAN ART**  
ALUMINUM EXTRUSION L.P.Material Test ReportManifest: 328412Ticket:  
5552835

Our Order: 437823 - 2

Cust P.O.: 792398

Die: ES05740

Part: 5131-8251

Alloy Temper: 6061 T6511Description: 1.000 x 2.800

Print Date: 8/16/17

**Chemical Composition**

<u>CastNum</u>	<u>Si</u>	<u>Fe</u>	<u>Cu</u>	<u>Mn</u>	<u>Mg</u>	<u>Cr</u>	<u>Zn</u>	<u>Ti</u>	Maximum	
									<u>OtherEach</u>	<u>OtherTotal</u>
<u>3B6402</u>	0.60	0.19	0.23	0.04	0.84	0.05	0.01	0.02	0.05	0.15

**Mechanical Properties**

Strength ksi						
<u>Sample</u> <u>ID</u>	<u>Cast #</u>	<u>Lot #</u>	<u>Test</u> <u>Date</u>	<u>Ultimate</u> <u>Tensile</u>	<u>Yield</u> <u>2% offset</u>	<u>Elongation</u> <u>2" gage length</u>
427847	3B6402	A11	8/9/17	41.86	38.62	8.9

Applicable Specifications: ASTM B221-14 AMS-QQ-A200/8A

Country of Origin: ONTARIO, CANADA

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment

  
Evan Eng, Quality Assurance Manager

---

CERTIFICATION DU MATÉRIEL

CLIENT:  
SALABERRY-DE-VALLEYFIELD

ACIER OUELLETTE INC DIV.DE  
935 BOUL DU HAVRE  
SALABERRY-DE-VALLEYFIELD, QUEBEC  
QC J6S 5L1

NUMÉRO DE COMMANDE: 14734451 000030  
COMMANDE DU CLIENT: AC11905  
NUMÉRO DE PIÈCES:  
NUMÉRO DE LIVRAISON: 803419876 000030

NUMÉRO D'ARTICLE: 160001373  
DESCRIPTION INVENTAIRE: FLT EXT 6061 T6511 1 X 2 X 144

DESCRIPTION ARTICLE FINIS: ALUM Barre PLTE EXT 6061 T6511  
1po X 2po X 144po

NUMERO (S) DE COULÉE 386402  
BRAME / BOBINE / TIN (le cas échéant)  
5552835

**CERTIFICATION**

Un sondage de nos sources matérielles a indiqué que ni le mercure ni des substances radioactives ne sont introduits dans leurs produits ni ne sont utilisés dans aucun de leurs procédés. Alors que nous ne faisons aucun test indépendant pour le mercure ou la radiation, il n'y a rien dans le système de Ryerson qui pourrait entraîner la contamination de l'un ou l'autre type.

Ce document certifie que le matériel décrit ci-dessus a été expédié conformément à votre commande. Le producteur du matériel a certifié à Ryerson qu'il a été produit conformément aux spécifications suivantes:

ASTM B221

12/05/2017



Thomas Endres  
Vice-président - Approvisionnement

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6R0.250  
 DATE: DEC 14 2017

PO / BATCH NO.: 038398

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 20"  
 QUANTITY INSPECTED: 20"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250  
 THICKNESS RECEIVED: 0.250  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Astm B211
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Heat # 67081
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>pl</u> <span style="float: right;">9</span>	SIGNED OFF BY: _____	
DATE: <u>DEC 14 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**SPECIFICATION CONTROL DRAWING**

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/415/416)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6R/D DDD  
DIA.

WHERE "D DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.625

B	REFORMAT DWG. ADD B211 & B221 SPEC (ZN DB-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
TITLE 6061-T6 ROUND BAR			
REV. B			
SHEET 1 OF 1			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD. NOT BE LOANED, REPRODUCED, COPIED, OR DISTRIBUTED WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

RELEASED  
2009-09-09  
147

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6R1-500  
 DATE: DEC 14 2017

PO / BATCH NO.: 038598/5021845

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 20"  
 QUANTITY INSPECTED: 20"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500  
 THICKNESS RECEIVED: 1.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	<u>Astm B221</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	<u>Heat #36375</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>	SIGNED OFF BY: _____		
DATE: <u>DEC 14 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR  
 SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
 OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6R[D.DDD]  
 [DIA.]

WHERE "D.DDD" = DIAMETER IN INCHES  
 EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
 R 2009-09-09  
 MP

B		REFORMAT DWG. ADD B211 & B221 SPEC (ZND8-1), REF PAR 08-020A		CP	09.07.13
A		NEW ISSUE		DS	01.06.08
REV		DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD		REV. B	
DRAWN		HAWKESBURY, ONTARIO, CANADA		SHEET 1 OF 1	
CHECKED		DRAWING NO.	M6061T6R	SCALE	
MFG. APPR.		TITLE	6061-T6 ROUND BAR	NTS	
APPROVED		DATE 09.07.13		COPYRIGHT © 2001 BY DART AEROSPACE LTD	
DE APPR.				NOT BE LOANED, REPRODUCED, COPIED, OR REPRODUCED WITHOUT	

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6R0.625  
 DATE: DEC 14 2017

PO / BATCH NO: 038598/5021846

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 40"  
 QUANTITY INSPECTED: 40"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625  
 THICKNESS RECEIVED: 0.625  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	<u>Astm B-221</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	<u>Heat # 66092</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>rel</u> <span style="float: right;">DAS</span> DATE: <u>DEC 14 2017</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6R(D.DDD) DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
2009-08-09  
MJP

B	REFORMAT DWG. ADD B2118 B221 SPEC (ZIN D8-1).	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
SHEET 1 OF 1			
TITLE 6061-T6 ROUND BAR			
SCALE NTS			
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 R0.750  
 DATE: DEC 14 2017

PO / BATCH NO.: 038398/502187

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 40'  
 QUANTITY INSPECTED: 40'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>A57m B-221</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	<u>Heat# 68706</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>ml</u> <span style="float: right;">JAS</span>	SIGNED OFF BY: _____	
DATE: <u>DEC 14 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR  
SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
PART NUMBER: M6061T6R[D.DDD]  
DIA.  
WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
R 2009-09-09  
MAD

B	REFORMAT DWG. ADD B211& B221 SPEC (ZN DB-1), REF PAGE 020A	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
SHEET 1 OF 1			
TITLE 6061-T6 ROUND BAR			
SCALE NTS			
DATE 09.07.13			
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061H6R0.375  
 DATE: DEC 14 2017

PO / BATCH NO.: 038598/502844

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 20"  
 QUANTITY INSPECTED: 20"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375  
 THICKNESS RECEIVED: 0.375  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	- ASTM B-221
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	Heat # C24551/1-4-1 HT# 68219
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>ml PD.</u>	SIGNED OFF BY: <u>*</u>		
DATE: <u>DEC 14 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

SPECIFICATION:

00-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR 00-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6R1D.DDD  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.825

alloy is 6061  
~~is ASTM B16 acceptable.~~  
QD.

**RELEASED**  
2009-09-09  
MSP

B	REFORMAT DWG. ADD B2116 B221 SPEC (2N D6-1).	CP	09.07.13
A	NEW ISSUE	DS	01.06.06
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	DRAWING NO. M6061T6R	REV. B
TITLE 6061-T6 ROUND BAR	SHEET 1 OF 1	SCALE NTS

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 4606176 B1.000x02.000  
 DATE: DEC 15 2017

PO / BATCH NO.: 038598/5021854

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 36"  
 QUANTITY INSPECTED: 36"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.00  
 THICKNESS RECEIVED: 1.00  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	- AMS QQ-A200/3
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	Heat # 5207765802 HT# 386402
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>	SIGNED OFF BY: <u>[Signature]</u>		
DATE: <u>DEC 15 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T65107T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/B OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW |  
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
2009-08-03

B		REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N D7-1)		CP	09 07 13
A		NEW ISSUE		DS	01 06 08
REV		DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN	DS	DRAWING NO. M6061T6B			
CHECKED	DS	REV. B SHEET 1 OF 1			
MFG. APPR.	DS	TITLE 6061-T6 BAR			
APPROVED	DS	SCALE NTS			
DE APPR.	DS	DATE 09.07.13			

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304R0.4375  
 DATE: DEC 14 2017

PO / BATCH NO.: 038598/5021848

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 12"  
 QUANTITY INSPECTED: 12"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.4375  
 THICKNESS RECEIVED: 0.4375  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>Astm A276</u>
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>Heat # 102445</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u></u> <span style="float: right; text-align: right;">DAS 9 3.6</span> DATE: <u>DEC 14 2017</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR  
(NOTE: AISI 303 NOT ACCEPTABLE)

A SPECIFICATION:

ASTM A276

PART NUMBER

M304R[D.DDD]  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 0.75" ROUND BAR = M304R0.750

RELEASED  
09/08/25/14

B	REFORMAT DWG. ADD SPECS (ZN D6-1).	CP	09.07.15
A	NEW ISSUE	AJS	08.03.03
REV.	DESCRIPTION	BY	DATE
DESIGN	ALS		
DRAWN	97		
CHECKED	13		
MFG. APPR.	M304R		
APPROVED			
DE APPR.			
DATE	09.07.15		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO.		REV. B	
M304R		SHEET 1 OF 1	
TITLE		SCALE	
304/316 ROUND BAR		NTS	
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.500  
 DATE: DEC 14 2017

PO / BATCH NO.: 038598/5021849

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 36"  
 QUANTITY INSPECTED: 36"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500  
 THICKNESS RECEIVED: 0.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	<u>A57m A582</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	<u>Heat# 233C</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>msd</u> <span style="float: right;">DAS 9</span>	SIGNED OFF BY: _____	
DATE: <u>DEC 14 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

PART NUMBER:

ASTM A582  
M303R0.750  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
2010-02-02  
NPD

B	REFORMAT DWG. ADD SPECS (ZN D8-1)	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
REV. B			
SHEET 1 OF 1			
SCALE			
303 ROUND BAR			
NTS			
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.750  
 DATE: DEC 14 2017

PO / BATCH NO.: 038398/5021850

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 36"  
 QUANTITY INSPECTED: 36"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750  
 THICKNESS RECEIVED: 0.750  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>Astm A582</u>
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<u>Heat #490862 409862</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>[Signature]</u> <span style="float: right;">DAS</span>	SIGNED OFF BY: _____	
DATE: <u>DEC 14 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

ASTM A582  
M303R1D.DDD  
DIA

PART NUMBER:

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
2010-02-02  
NR

B	REFORMAT DMG. ADD SPECS (ZN D8-1).	CP	10 01 05
A	NEW ISSUE	DS	01 12 20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV. B
M303R	SHEET 1 OF 1
TITLE	SCALE
303 ROUND BAR	NTS
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R1.250  
 DATE: DEC 15 2017

PO / BATCH NO.: 038598/5021851

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 6"  
 QUANTITY INSPECTED: 6"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250  
 THICKNESS RECEIVED: 1.250  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/> N <input type="radio"/>	<u>A193 Gr B7</u>
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input type="radio"/> N <input checked="" type="radio"/>	<u>Heat # N#16202066</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>rd</u>	DAS 2	SIGNED OFF BY: _____
DATE: <u>DEC 15 2017</u>		DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in





DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. M4140H-R	REV. A SHEET 1 OF 1
DATE 05.02.21		TITLE 4140 ROUND BAR	SCALE 1:1
A	05.02.21 NEW ISSUE		

PURCHASE MATERIAL: AISI 4140H ROUND BAR

PER AISI 4140 OR ASTM A304-02/-A-434-BC /

-A193-D2-GR4E-B7 / -A29-03 / -A-22-91 CR

UNS# - G41400

MINIMUM ULTIMATE TENSILE STRENGTH = 100 ksi

MINIMUM YIELD TENSILE STRENGTH = 66 ksi

PART NUMBER: M4140H-R | D.DDD | WHERE D.DDD = DIAMETER IN INCHES  
DIA

EG. 7/8" ROUND BAR = M4140H-R0.875

RELEASED  
5.13.25

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 B0.625x01.500

PO / BATCH NO.: 038398/5021852

DATE: DEC 15 2017

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 20"  
 QUANTITY INSPECTED: 20"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625  
 THICKNESS RECEIVED: 0.625  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	Agm 0221
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	Heat # 201604056
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>	SIGNED OFF BY: _____		
DATE: <u>DEC 15 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)

*[Handwritten signature]*  
OR ~~QQ-A-225/8~~ OR ~~AMS-QQ-A-225/8~~ OR ~~AMS 4117/4128/4115/4116~~

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

**RELEASED**  
2009-03-03  
*[Handwritten signature]*

B	REMOVE QQ-A-225/8, OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (Zn D7-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	<i>[Handwritten signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Handwritten signature]</i>	DRAWING NO.	REV. B
MFG APPR.	<i>[Handwritten signature]</i>	M6061T6B	SHEET 1 OF 1
APPROVED	<i>[Handwritten signature]</i>	TITLE	SCALE
DE APPR.	<i>[Handwritten signature]</i>	6061-T6 BAR	NTS
DATE	09.07.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD	

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 B1-000X04.000  
 DATE: DEC 15 2017

PO / BATCH NO.: 038598/5021853

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 12"  
 QUANTITY INSPECTED: 12"  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	Astm B221
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	Heat# 68708
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>[Signature]</u> DATE: <u>DEC 15 2017</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:

QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4154/116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B | T.TTT | X | WWW.WWW |  
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

B	REWORK: QQ-A-225/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (EN 107-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	DS		
CHECKED	DS		
MFG. APPR.	DS		
APPROVED	DS		
DE APPR	DS		
DATE	09.07.13		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA  
DRAWING NO. M6061T6B  
TITLE 6061-T6 BAR  
REV. B  
SHEET 1 OF 1  
SCALE NTS

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**RELEASED**  
2009-09-03

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S16GA  
 DATE: DEC 15 2017

PO / BATCH NO.: 038598/5021855

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 192<sup>lb</sup>  
 QUANTITY INSPECTED: 192<sup>lb</sup>  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.63  
 THICKNESS RECEIVED: 0.63  
 SHEET SIZE ORDERED: 4x8  
 SHEET SIZE RECEIVED: 4x8

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/> N <input type="radio"/>	Aster A240
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N <input type="radio"/>	Heat # 3305
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DEC 15 2017</u>	<u>A</u>	SIGNED OFF BY: _____	
DATE: _____	DAS	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ANSI 304/316 SS SHEET  
ANNEALED

SPECIFICATION:

MIL S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240

FINISH:

FINISH IDENTIFIER  
UNPOLISHED No. 1  
UNPOLISHED No. 2D  
UNPOLISHED No. 2B  
POLISHED No. 3  
POLISHED No. 4  
BUFFED No. 6  
BUFFED No. 7  
BUFFED No. 8

PART NUMBER:

M304S TT GA #P  
GA

WHERE "TT" = GAUGE THICKNESS  
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA  
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.08375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04

ECN 15-122

REV	DESCRIPTION	DATE
A	NEW ISSUE	01 09 24
B	REFORMAT DWG, ADD ASTM/ASME SPECS (Zn D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	09 06 01
C	DEFINED FINISH OPTION (Zn C8) AND EXAMPLE OF MATERIAL FIN WITH FINISH OTHER THAN 2B (Zn B5).	12 09 20
D	ADDED GAUGES 0-7.	15 01 06

DESIGN	DS	DATE
DRAWN	AJS	
CHECKED		
IMFG. APPR.		
APPROVED		
DE APPR.		
DATE	15.01.06	

DART AEROSPACE LTD	REV. D
HAWKESBURY, ONTARIO, CANADA	DRAWING NO.
	M304S
	TITLE
	304/316 SS SHEET
	SCALE
	NTS

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M3045 226-A  
DATE: DEC 15 2017

PO BATCH NO. 038598/5021857

MATERIAL CERT REQ'D: YLOS  
QUANTITY RECEIVED: 32 M<sup>2</sup>  
QUANTITY INSPECTED: 32 M<sup>2</sup>  
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.32  
THICKNESS RECEIVED: 0.32  
SHEET SIZE ORDERED: 4K8  
SHEET SIZE RECEIVED: 4K8

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	<u>Astm A240</u>
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	<u>Heat# 2087</u>
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>ml</u>	DAS 9	SIGNED OFF BY: _____	
DATE: <u>DEC 15 2017</u>	3.88	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET  
ANNEALED

SPECIFICATION:

MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240 (16)  
OR ASME SA240

FINISH:

FINISH IDENTIFIER  
UNPOLISHED No. 1  
UNPOLISHED No. 2D  
UNPOLISHED No. 3  
POLISHED No. 4  
POLISHED No. 6  
BUFFED No. 7  
BUFFED No. 8

PART NUMBER:

M304S TT GA #P  
[GA]

WHERE "TT" = GAUGE THICKNESS  
WHERE "#P" = FINISH IDENTIFIER

GAUGE THICKNESS REFERENCE:

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA  
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021675	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.05	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.08375	0.084 - 0.098
12	0.09375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325



REV	DESCRIPTION	DATE
D	ADDED GAUGES 0-7.	15.01.06
C	DEFINED FINISH OPTION (2N CQ) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (2N B5).	12.09.20
B	REFORMAT DWG. ADD ASTM/ASME SPECS (2N DB-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	09.06.01
A	NEW ISSUE	01.09.24
DESIGN	DS	DATE
DRAWN	AS	
CHECKED	AS	
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	15.01.06	

RELEASED  
2015 FEB 04  
ECN 15-122 97

DART AEROSPACE LTD  
HAWKESBURY, ONTARIO, CANADA  
REV. D  
SHEET 1 OF 1  
SCALE  
NTS

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M3045146A  
 DATE: DEC 15 2017

PO / BATCH NO.: 038598/5021856

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 64 PL  
 QUANTITY INSPECTED: 64 PL  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.063 0.063  
 THICKNESS RECEIVED: 0.063  
 SHEET SIZE ORDERED: 4x8  
 SHEET SIZE RECEIVED: 4x8

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	<u>A64m A240</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	<u>Heat # L22142025</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>[Signature]</u> DATE: <u>DEC 15 2017</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**SPECIFICATION CONTROL DRAWING**

PURCHASE MATERIAL: AISI 304/316 SS SHEET  
ANNEALED

SPECIFICATION:

MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240

FINISH:

FINISH IDENTIFIER  
UNPOLISHED No. 1  
UNPOLISHED No. 2D  
UNPOLISHED No. 2B  
POLISHED No. 3  
POLISHED No. 4  
BUFFED No. 6  
BUFFED No. 7  
BUFFED No. 8  
DART M-NUMBER IDENTIFIER  
1P  
2D  
NONE  
3P  
4P  
6P  
7P  
8P

PART NUMBER:

M304S TT GA #P  
GA

WHERE "TT" = GAUGE THICKNESS  
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA  
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021675	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.08375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.226
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325



D	ADDED GAUGES 0-7.	A/S	15.01.06
C	DEFINED FINISH OPTION (ZN CB) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (ZN B5)	MB	12.09.20
B	REFORMAT DWG. ADD ASTM/ASME SPECS (ZN DB-1), ADD GAUGE REF (CB-1), REF PAR 08-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	AS		
CHECKED	B		
MG. APPR.	M304S		
APPROVED			
DE APPR.			
DATE	15.01.06		

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**RELEASED**  
2015 FEB 04  
E2015-122 47



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO038598**

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO038598  
**PO Date:** 12/7/17  
**Due Date:** 12/13/17  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pynt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:** QUOTE NO. SOU00756580, SOU0076051

## Items

Line Item	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M6061T6R0.250	6061-T6 Round Bar 0.250" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	20 ft	0 ft	20 ft	\$0.1565/ft	\$3.13
2	M6061T6R0.375	6061-T6 Round Bar .375" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	20 ft	0 ft	20 ft	\$0.3775/ft	\$7.55
3	M6061T6R1.500	6061-T6 Round Bar 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	20 ft	0 ft	20 ft	\$5.521/ft	\$110.42

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Items									
Line Item	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	M6061T6R0.625	6061-T6 Round Bar .625" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	40 ft	0 ft	40 ft	\$0.99625/ft	\$39.85
5	M6061T6R0.750	6061-T6 Round Bar .750" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	40 ft	0 ft	40 ft	\$1.3385/ft	\$53.54
6	M6061T6R0.563	6061-T6 Round Bar .563" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/14/17	120 ft	0 ft	120 ft	\$1.013666/ft	\$121.64
7	M304R0.4375	304 Round Bar 0.4375" : MATERIAL: AISI 304/316 SS <del>ROUND BAR AS PER ASTM A276</del> NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	12/13/17	12 ft	0 ft	12 ft	\$1.5325/ft	\$18.39
8	M6061T6R1.750	6061-T6 Round Bar 1.750" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	12/13/17	20 ft	0 ft	20 ft	\$7.2305/ft	\$144.61
9	M303R0.500	303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	12/13/17	36 ft	0 ft	36 ft	\$1.973888/ft	\$71.06
10	M303R0.750	303 Round Bar 0.750" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	12/13/17	36 ft	0 ft	36 ft	\$4.7455/ft	\$170.84
11	M303R1.000	303 Round Bar 1.00" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	12/13/17	12 ft	0 ft	12 ft	\$7.901666/ft	\$94.82

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Items									
Line Item	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
12	M4140H-R1.250	4140 Round Bar 1.250 : AISI 4140H ROUND BAR PER AISI 4140 OR ASTM A304-02/-A-434-BC/-A193-03- GRADE B7/-A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft	Firmed	12/13/17	6 ft	0 ft	6 ft	\$6.921666/ft	\$41.53
13	M6061T6B0.625X01.500	6061-T6 Bar .625 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A- 225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	12/13/17	20 ft	0 ft	20 ft	\$3.2645/ft	\$65.29
14	M6061T6B1.000X04.000	6061-T6 Bar 1.00 X 4.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A- 225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	12/13/17	12 ft	0 ft	12 ft	\$12.765833/ft	\$153.19
15	M6061T6B1.250X04.500	6061-T6 Bar 1.25 X 4.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A- 225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	12/13/17	12 ft	0 ft	12 ft	\$22.91666/ft	\$275.00
16	M6061T6B1.000X02.000	6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A- 225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	12/13/17	40 ft	0 ft	40 ft	\$7.46275/ft	\$298.51
17	M6061T6B1.500X3.000	6061T6 Bar 1.500 X 3.000 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A- 225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	12/13/17	12 ft	0 ft	12 ft	\$14.020833/ft	\$168.25
18	M304S16GA	304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	12/13/17	192 sf	0 sf	192 sf	\$6.508625/sf	\$1,249.66

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Items									
Line Item	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
19	M304S14GA	304SS sheet .080 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	12/13/17	64 sf	0 sf 64 sf	64 sf	\$8.365/sf	\$535.36
20	M304S22GA 64 sf Rejected	304/316 .032 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	12/13/17	96 sf	0 sf 32 sf	96 sf	\$3.6232291/sf	\$347.83
21	M6061T6S.100	6061-T6 .100 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	12/13/17	48 sf	0 sf	48 sf	\$6.6047916/sf	\$317.03
22	M6061T6S.080	6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	12/13/17	144 sf	0 sf	144 sf	\$5.2480555/sf	\$755.72
Grand Total:								\$5,043.21	
Order Notes									
Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality documents  A048 counterfeit parts avoidance, detection, mitigation and disposition program  A049 supplier awareness									
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit <a href="http://www.dartaerospace.com">www.dartaerospace.com</a> for further explanation.									

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